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ABSTRACT

A demographic and educational profile was constructed of learners enrolled in California employment training programs. Summary data were derived from 47,318 Employability Competency System (ECS) Appraisal answer sheets received by the Comprehensive Adult Student Assessment System (CASAS) office from 1987 through 1990. ECS provides reading, math, and communication assessment linked to competencies and competency-based curriculum materials appropriate for adult basic education, pre-employment/work maturity, and English-as-a-Second-Language programs. ECS Appraisal forms the foundation of the system. ECS reading and math appraisal provides an initial assessment of a learner's basic functional literacy skill levels in a training and employment context. (Demographic and test performance information is summarized. The demographic profile includes self-reported information on the participants' gender, age, ethnic background, and native language. The educational profile presents attainment information relating to the highest grade level completed and the highest degree earned by the respondents. Demographic and educational profile data are cross-tabulated with test score performance in reading and math. Two appendices are included: (1) components of ECS; and (2) participating counties and service delivery areas.) (NLA)

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Employability Competency System

FINAL REPORT

California Statewide Results

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Prepared for the
California Department of Education
Youth Adult Alternative Education Services Division
by

CASAS Comprehensive Adult Student Assessment System

1991

CE 059 318

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Employability Competency System Report

ECS Appraisal Results

Prepared for the
California Department of Education
Youth Adult Alternative Education Services Division
by

CASAS Comprehensive Adult Student Assessment System

2725 Congress Street, Suite 1-M
San Diego, California 92110

January 1991

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CHAPTER ONE: INTRODUCTION

The Job Training Partnership Act (JTPA) of 1982 provided for the establishment of educational and work training programs to prepare economically disadvantaged youth and unskilled adults for successful entry into the labor force. Such programs are designed to focus on the individual, assisting in the attainment of a productive and quality job, while simultaneously improving the individual's long-term employment potential.

In Section 106, Congress viewed this investment in human capital a worthy investment given that participation in such JTPA programs produced an increase in employment and earnings and less dependency on the welfare system. Adult participants retained in unsubsidized employment were deemed successful and terminated from training programs. Youth participants demonstrating proficiency in two or more of the skill areas (pre-employment/work maturity, basic education skills, and job-specific skills) in which the participant was deficient at enrollment could also report competency attainment and exit the training programs.

In response to the youth regulations in Section 106, Private Industry Councils (PICs) throughout the country established a variety of methods to identify relevant employment competencies, appropriate curriculum, as well as valid and reliable assessment instruments. In the process each found that the development, implementation, and evaluation of a competency-based system that met the standards of effectiveness and relevancy was time consuming and required the expertise of curriculum, training, and assessment specialists.

The California State Job Training Coordinating Council in 1985-86 identified the establishment of competency-based education programs as a statewide priority need. Since 1987, the California Department of Education — Employment Preparation Unit, in

coordination with the Job Training Partnership Office (JTPO), has contracted with the Comprehensive Adult Student Assessment System (CASAS) to develop a management and assessment system to assist JTPA programs implement comprehensive competency-based programs.

To ensure that the CASAS employment competencies were representative of the statewide PIC-approved competencies, CASAS conducted a pre-employment and work maturity competency survey of all California PICs in the spring of 1987. The survey was organized according to the 11 specific competency areas addressed by the U.S. Department of Labor (DOL) for JTPA contractors. A competency was considered high priority and essential for inclusion into the comprehensive competency system if over 70 percent of the respondents indicated that the competency was either a PIC-approved competency or was being considered as a PIC-approved competency. The competencies identified as both high priority and essential form the foundation of the Employability Competency System (ECS).

One major component of the Employability Competency System is the ECS Appraisal. It provides an initial assessment of a learner's level of skill development in basic reading comprehension and math computation in an employability context. This 40-minute appraisal provides a quick and credible means of determining a learner's general instructional placement, such as beginning, intermediate, or advanced ABE/ESL and pre-GED. It has been deemed an appropriate assessment instrument for both youth and adult employment training programs. It is used extensively throughout California as well as in 27 other states.

JTPA FUNDING

JTPA funding requires the adoption of a comprehensive management and assessment system by which to measure adult and youth basic reading and math skills in an employability context. It is divided into three types of funding: Title IIA, Title IIB, and Title III. Title IIA funding provides for programs offering employment and training services to targeted groups, including high school dropouts, single parents, special needs learners, older workers, displaced homemakers, criminal offenders, and recovering alcoholics and drug addicts. Title IIB funding provides for the Summer Youth Employment and Training Programs (SYETPs) responsible for locating jobs for disadvantaged youth ages 14-21. Earlier research had found that many young people

lose ground academically during summer vacation and are also in need of basic skills remediation for employment. Title III funding provides for retraining dislocated workers and assisting them in re-entering the work force. Allocation of these three types of funds remains constant throughout the country.

Seventy-eight percent of the Title II funding comprises the combined Title IIA and Title IIB monies allocated to local and statewide service delivery areas who, in turn, redirect the funding to local education agencies (LEAs). Such agencies must effectively assess and provide basic skills training for youth and adults. They include community colleges, secondary schools, county offices of education, regional occupational programs, adult schools, private schools, community-based organizations, and correctional institutions.

The remaining 22 percent comprise Title IIA discretionary funds allocated into the following training programs: older persons (three percent), incentive grants (six percent), state education coordination grants (SECG to SDE/COCCC - eight percent) and administration (five percent). The California state education coordination grants are divided by percentage to the following programs: state administration of funds and education statewide priorities (20%), Greater Avenues for Independence activities (GAIN - 50%), and individual requests for proposals (RFPs - 30%). GAIN is California's welfare reform legislation.

Many of the ECS users in California receive 8-30% or 8-50% funding. Eight-thirty percent agencies must submit individual requests for JTPA funding. If approved, they are encouraged to administer the ECS Appraisal for their initial basic skills assessment. Agencies who opt to use the ECS Appraisal are not charged for the assessment materials. The 8-50% agencies, also known as GAIN programs, identify and serve learners receiving welfare assistance.

REPORT IMPETUS

The purpose of this report is to provide a demographic and educational profile of learners enrolled in employment training programs in California. Summary data for this report were derived from 47,318 Employability Competency System Appraisal answer sheets received by the CASAS office from 1987 through 1990. Demographic and test performance information is summarized in the following chapters.

CHAPTER TWO:
THE EMPLOYABILITY COMPETENCY SYSTEM

The Employability Competency System (ECS) provides reading, math, and communication assessment linked to competencies and relevant competency-based curriculum materials appropriate for Adult Basic Education (ABE), pre-employment/work maturity, and English as a Second Language (ESL) programs. Using the ECS, service providers may effectively place the "most in need, hardest to serve" into appropriate educational and training program levels, monitor progress toward goal attainment, and certify attainment of employment-related competencies. CASAS provides a curriculum management system with an underlying measurement scale that ranges from pre-literate through high school level. With such an integrated data base of student functioning, program managers can allocate resources and evaluate programs more appropriately.

The ECS is appropriate for use in Job Training Partnership Act (JTPA)-related programs administered by Private Industry Councils (PICs) and Service Delivery Areas (SDAs). It is also appropriate for various JTPA-funded programs and non-JTPA employment training programs including, but not limited to corrections, workplace literacy, refugee assistance, homeless and dislocated workers, welfare reform, family support, and vocational education.

On July 1, 1988, the U.S. Department of Labor established legislation requiring JTPA-funded agencies to assess the reading skills of all JTPA participants and to report the number of participants functioning below a 7th grade reading level. From test results of over 50,000 JTPA and 112,000 Greater Avenues for Independence (GAIN) participants, CASAS determined that a **scale score below 215 represents functioning below a 7th grade reading level**. Consequently, agencies using CASAS could still comply with new DOL regulations. (This requirement is for data collection purposes only. Private

Industry Councils are free to determine which scale score levels are necessary for their local labor market needs.)

THE ECS APPRAISAL

The ECS Appraisal forms the foundation of the Employability Competency System. It provides a quick and credible initial assessment of a learner's basic functional literacy skill levels in a training and employment context. It allows for an objective screening and placement into an appropriate classroom for basic skills remediation, as well as a method to collect basic demographic information in a standardized format.

The Reading portion of the ECS Appraisal assesses a learner's ability to apply basic reading skills using reading materials one may encounter both in training and in the workplace. The content includes interpreting job applications, resumes, job descriptions, and safe work procedures. All the items are evenly and widely distributed along a wide CASAS scale score range. The Reading section consists of 20 multiple-choice items, gradually increasing in difficulty, and should be completed within 20 minutes.

The Math portion of the ECS Appraisal assesses a learner's ability to perform basic math computation and apply basic math skills in a functional context related to employment. The content includes computing decimals and fractions, interpreting wage information and budgets, and calculating interest rates. All the items are evenly and widely distributed along a wide CASAS scale score range. The Math section consists of 20 multiple-choice items, gradually increasing in difficulty, and should be completed within 20 minutes.

The ECS Appraisal was developed from the CASAS Item Bank. This bank of over 5,000 items has been under continual development and refinement since 1980. The application of Item Response Theory (IRT) to these 5,000 items assigns a reliable index of standardized difficulty. The test forms developed from these items accurately measure basic skills in a functional context.

PSYCHOMETRIC PROPERTIES

The psychometric properties of the ECS Appraisal are briefly summarized below and show the instrumentation used in the ECS Appraisal to be internally consistent and accurate with the psychometric model used.

Reliability Computation of Kuder-Richardson (KR)-20 indices for the ECS Reading and Math test items indicated that in the case of the ECS Reading Test, the KR-20 was .81. The corresponding figure for the ECS Math Test was .89.

Item-Total Correlations Point bi-serial correlation coefficients were obtained for the ECS Reading and Math Tests. This correlation should generally fall between .40 and .60 for each of the individual test items. In the case of the ECS Reading Test, the coefficients ranged from .30 to .58, with a mean value of .48. Similar coefficients for the ECS Math Test ranged from .46 to .63, with an average P-Value of .57.

SCALE SCORE INTERPRETATION

Functional levels of basic skills have been identified based on eight years of statewide achievement data for learners enrolled in Basic Education programs throughout California. The following descriptions of the levels will assist in the interpretation of the test results.

Below 200 Participants functioning below 200 have difficulty with basic and computational skills necessary to function in employment and in the community. These participants have difficulty providing basic personal identification in written form (as in filling out job applications), are not able to compute wages and deductions on paychecks, and cannot follow simple basic written directions and safety procedures. (A Level)

200 - 214 Participants functioning between 200 and 214 have low literacy skills and have difficulty pursuing other than entry-level programs requiring the learner to demonstrate basic computations only. These participants are functioning below a 7th grade level. (B Level)

215 - 224 Participants functioning between 215 and 224 are functioning above a basic literacy level and are able to handle basic literacy tasks and basic computational skills in a functional setting related to employment. They have difficulty following more complex sets of directions and are functioning below a high school level. (C Level)

225 and Above Participants functioning at or above 225 can function at a high school entry level in basic reading and math. If they do not have a high school diploma, they can profit from instruction at the high school level. These individuals can usually perform work that involves following oral and written directions in familiar and some unfamiliar situations. Those participants 18 years of age and above can profit from instruction in General Educational Development (GED) preparation and, in a short time, have a high probability of passing the GED test. (D Level)

ECS APPRAISAL CONTENT

Reading Test Content

- Interpret job applications, resumes, and letters of application
- Identify and use sources of information about job opportunities such as job descriptions and job ads
- Recognize standards of behavior for job interviews and select appropriate questions and responses during job interviews
- Identify appropriate skills and education for getting jobs in various occupational areas
- Identify appropriate behavior, attitudes, and social interactions for keeping a job and getting a promotion
- Interpret job responsibilities and performance reviews

ECS APPRAISAL CONTENT

Math Test Content

- Add decimal numbers
- Subtract decimal numbers
- Multiply decimal numbers
- Divide whole numbers
- Add common fractions
- Subtract common fractions
- Interpret and compute wages and wage information
- Use catalogs, order forms, and related information to purchase goods and services
- Interpret information about personal and family budgets
- Interpret appropriate standard measurements for volume and temperature
- Calculate interest rates
- Identify and use information about training opportunities

Percentages of Adult Learners and Selected Reading Tasks At or Above Successive Points on the CASAS Scale – N = 26,771

Selected Tasks at Decreasing Levels of Difficulty		Highest Grade Level Completed				Native Language			Highest Degree Earned			
		0-7	8-9	10-11	12+	English	Spanish	Other	None	GED	HS	Other
223	Performance Appraisal	36.8	43.6	55.0	75.8	57.3	48.8	46.7	61.0	64.8	72.8	49.2
215	Employment Cover Letter	48.8	63.9	69.7	76.6	70.7	64.3	55.6	65.9	73.0	74.4	68.4
204	Interviewing for a Job	72.4	82.2	87.2	92.4	87.6	85.2	74.9	84.0	88.9	90.7	87.7

WHEN YOU LOOK FOR A JOB

HOW to Look

1. Apply in person, whenever possible, and ask to talk to the person who does the hiring for the employer or company.
2. Contact the person who hires during the hours of the day or days of the week that they most frequently hire. Don't apply during the lunch hour or after working hours and don't take friends or relatives with you.
3. Whenever possible, ask for a specific job or types of work you are willing (and qualified) to take. Stress your qualifications for the job and your interest in it. Avoid talking about your personal problems.
4. Be realistic when discussing wages with prospective employers.
5. File written applications for work whenever you have the chance to do so.
6. Make repeat contacts with employers but only if you are encouraged to do so by the employer.
7. Use the telephone only to obtain leads and make appointments for job interviews. Do not attempt to conduct job interviews by phone unless the employer requests that it be done or you know the employer personally.

Reading Test Item – RIT 204

According to the advice above, what should you not talk about during an interview?

(Selected response - 4 choices)

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Reading Test Items

RIT 215

1722 Russell Circle
San Diego, CA 92301
May 20, 1990

Miss Pat Dixon
P.O. Box 92
San Jose, CA 92621

Dear Miss Dixon:

In answer to your advertisement for a child-care worker in last Sunday's *Newstime*, I would like to apply for the position. I am 18 years old and about to graduate from Bradley High School.

At present, I am working part-time at the Bradley Child-Care Center. My supervisor there is Mrs. Betty Johnson.

I plan to work full-time after graduation and would like to learn more about caring for children. May I have an interview at your convenience? I am sure I could do a good job for you as a child-care worker.

Sincerely yours,

Bonnie Smith

Bonnie Smith

What information does Bonnie give concerning the dates she has worked at her present job?

(Selected response - 4 choices)

RIT 223

Performance Appraisal

QUALITY OF WORK Accuracy Economy of Materials Economy of Time (his own and others) Neatness Thoroughness Effectiveness	Work below quality requirements. Improvement is required. ☐	Work usually satisfies quality requirements. ☒	Quality high. Work very well done. Consistently meets and sometimes exceeds performance requirements. ☐	Work is superior. Quality of work consistently high and frequently exceeds performance requirements. ☐
QUANTITY OF WORK Productive Output Speed and Consistency of Output	Output below job requirements. Improvement is required. ☒	Output usually satisfies job requirements. ☐	Output continually meets and sometimes exceeds job requirements. ☐	Output very high and frequently exceeds job requirements. ☐
MERIT INCREASE GUIDELINES	MINIMUM	ACCEPTABLE	GOOD	SUPERIOR

When would this form be used?

(Selected response - 4 choices)

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Percentages of Adult Learners and Selected Math Tasks At or Above Successive Points on the CASAS Scale – N = 26,771

Selected Tasks at Decreasing Levels of Difficulty		Highest Grade Level Completed				Native Language			Highest Degree Earned			
		0-7	8-9	10-11	12+	English	Spanish	Other	None	GED	HS	Other
225	Calculating Sales Tax	45.6	52.2	59.3	72.0	56.5	60.5	68.0	55.0	64.0	69.9	62.5
215	Calculating Amount for Textbooks	62.7	71.3	76.7	83.4	74.5	75.9	77.6	73.4	78.3	81.8	74.4
203	Calculating Hours Worked for Time Sheet	80.5	86.5	89.1	91.9	87.7	89.0	88.6	87.5	89.0	90.9	89.7

TIME SHEET

John Smith — Employee

July 31 — Pay Period Ending

	IN	OUT	IN	OUT	Total Daily Hours
SUN	--	--	--	--	
MON	8:00 a.m.	11:30 a.m.	6:00 p.m.	9:00 p.m.	
TUE	8:00 a.m.	2:00 p.m.			6
WED	8:00 a.m.	11:30 a.m.	6:00 p.m.	9:00 p.m.	
THUR	8:00 a.m.	2:00 p.m.			6
FRI			6:00 p.m.	9:00 p.m.	3
SAT	---	---	---	---	

Employee's Signature _____ Total Hours _____

Math Test Item – RIT 203

What is the total number of hours John worked on Tuesday, Thursday, and Friday?

(Selected response - 4 choices)

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Math Test Items

RIT 215

ELECTRONICS ASSEMBLY COURSE DESCRIPTION

Total number of weeks per course: 13 — Fee: None

Number of days per week: 5 — Instructor: Mr. Thomas

Number of hours per day: 6

This course is designed to provide instruction in Basic Electronic Assembly. It covers reading schematics, reading color-coded resistors, and identification of electronic components. It includes the proper use of tools and the safety procedures necessary to avoid accidents in the shop.

Each student must take written tests, complete the required number of projects, and attend class regularly.

MATERIALS:

Electronic Assembly Methods	$17.01
N.A.S.A. Quality Publication	2.75
Allied Electronics Data Handbook	5.65
Dictionary of Electronics Terms	1.50
Student Notebook	

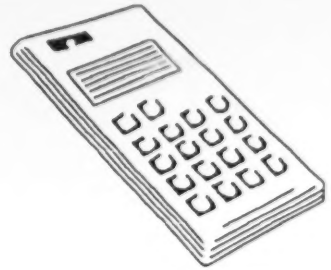
If a student buys Electronic Assembly Methods, Allied Electronics Data Handbook, and Dictionary of Electronics Terms, how much will he spend on books for this course?

(Selected response - 4 choices)

RIT 225

8-digit Calculator

CAPACITY MEMORY: 8-digit. Red light display. No memory.
ARITHMETIC FUNCTIONS: Adds, subtracts, multiplies, divides. Does repeat addition, subtraction, chain and mixed calculations.
SPECIAL FUNCTIONS: Percent key, floating decimal. Minus & overflow indicators.
CONSTRUCTION: Brown plastic. 5 1/4 x 2 1/4 x 1-in. Imported.
ELECTRICAL INFORMATION: 9-volt battery included. Adapter sold separately.
ORDERING INFO.: Instructions included. 3G580140 Shipping weight 5 oz....$6.84



PAGE NUMBER	CATALOG NUMBER	NAME OF ITEM	PRICE FOR ONE	TOTAL PRICE*

* Add 6% Sales Tax to Total Price

How much sales tax would you pay if you ordered five calculators?

(Selected response - 4 choices)

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CHAPTER THREE:
DEMOGRAPHIC AND EDUCATIONAL PROFILE

The following demographic and educational profile was drawn from an extensive data base of 47,318 Employability Competency System Appraisal answer sheets received by the CASAS office for the time period 1987 through 1990. The data are representative only of the individuals enrolled in employment training programs from the service delivery areas in California listed in Appendix B. The demographic profile includes self-reported information on the participants' gender, age, ethnic background, and native language. The educational profile presents attainment information relating to the highest grade level completed and the highest degree earned by the respondents. Test score performance in Reading and Math follows.

GENDER

In this sample population, approximately 52 percent of the participants were male and 48 percent were female. (See Figure 1.)

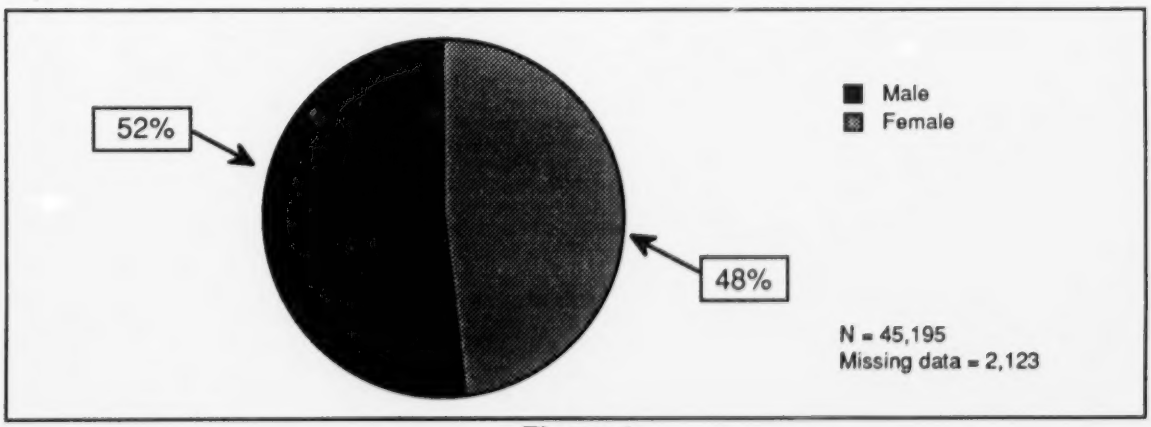

Figure 1

AGE

The learner population was generally quite young in age. Nearly half (48 percent) of the participant sample was under age 17. Twenty percent were between ages 18 and 21, while another six percent of the respondents were between ages 22 and 24. Only one-quarter of the sample (26 percent) stated their age at 25 and above.

(Please note that the data obtained from approximately 10,000 ECS Appraisal answer sheets from 1987 were scanned using slightly different categories for ages 15-24. The data should be interpreted accordingly.)

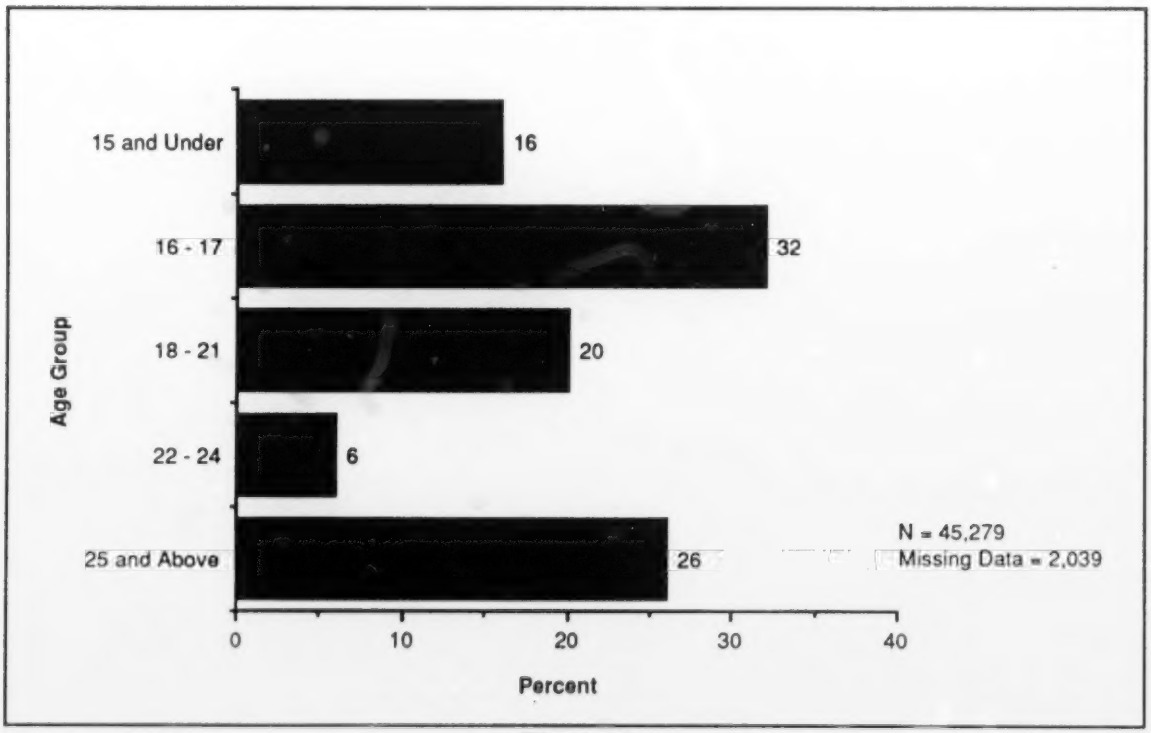

Figure 2

ETHNICITY

Approximately 33 percent of the respondents in this sample were of Hispanic origin, 27 percent were Caucasian, and 23 percent were Black. Fifteen percent were of Asian origin, distributed among Filipino, Indian (3%), Indochinese, and Pacific Islander. The remaining two percent of the respondents indicated Other. (See Figure 3.)

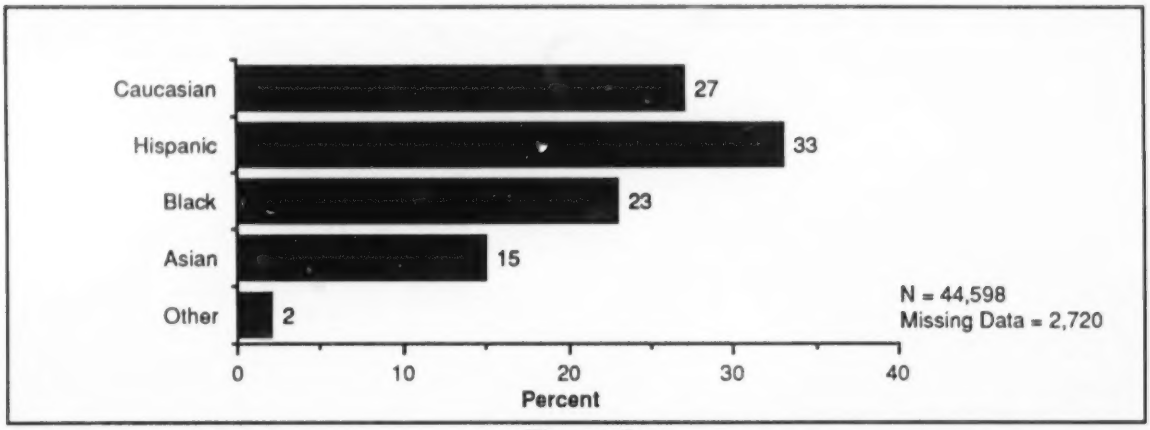

Figure 3

NATIVE LANGUAGE

English was the prominent native language among 69 percent of the participants, followed by Spanish (19%), Vietnamese (4%) and Laotian (2%). The remaining six percent responded Other, which included Cambodian, Korean, Chinese, Japanese, and Tagalog. (See Figure 4.)

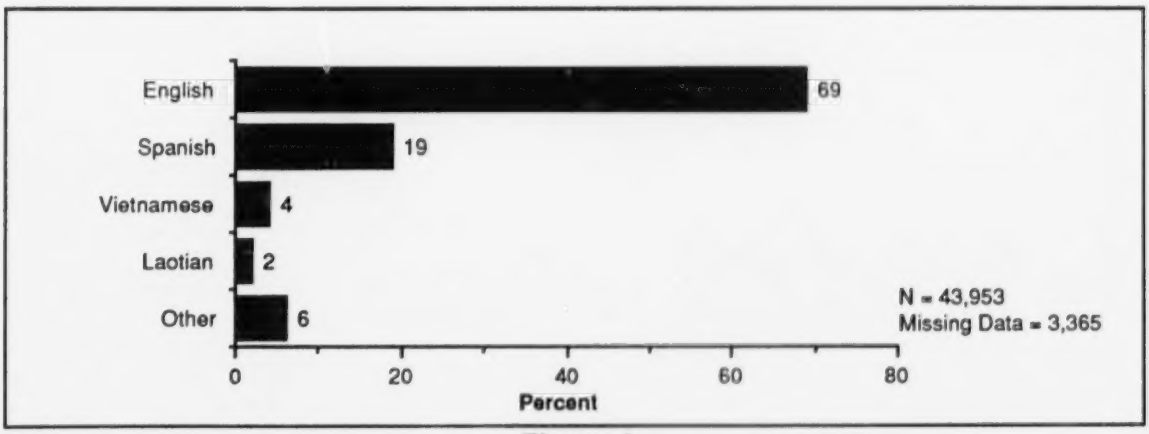

Figure 4

HIGHEST GRADE LEVEL COMPLETED

About five percent of the sample had completed fewer than eight years of education. Twenty-seven percent reported finishing 8 or 9 years of education, 39 percent had completed 10 or 11 years, while 22 percent had finished 12 years of education. The remaining seven percent had probably attended post-secondary school. (See Figure 5.)

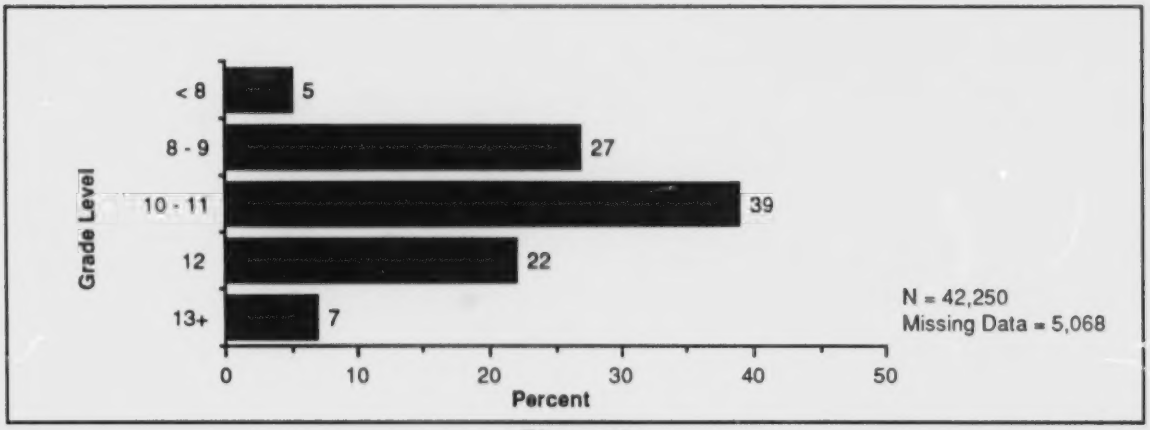

Figure 5

HIGHEST DEGREE EARNED

Over one quarter (26 percent) of the participants had earned a high school diploma, six percent had earned a General Education Degree (GED), while four percent indicated Other. Approximately 64 percent reported not having earned a secondary school diploma or its equivalent. (See Figure 6.)

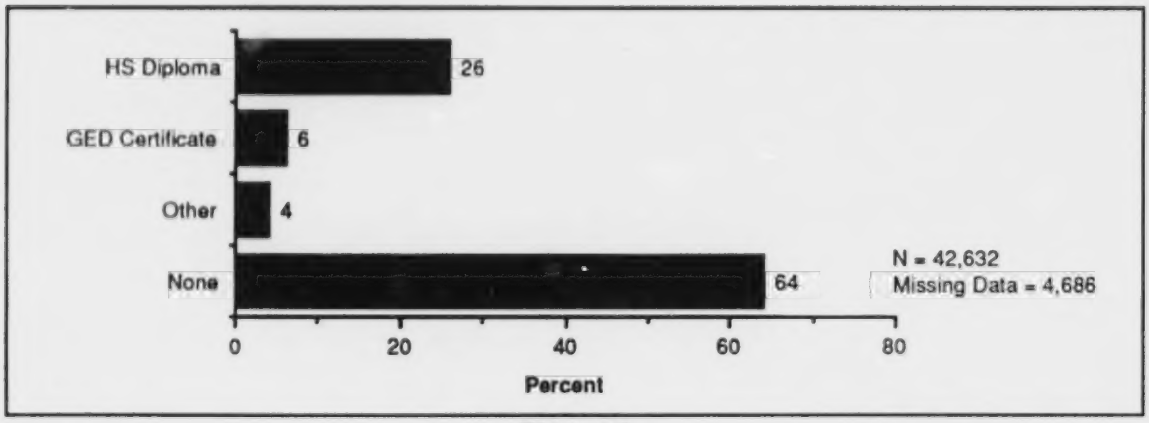

Figure 6

TEST SCORE PERFORMANCE DATA

On the reading portion of the ECS Appraisal, over 65 percent of the sample achieved a scale score of 225 or above, while only two percent scored below 200. Eleven percent scored between 200 and 214, while 22 percent scored between 215 and 224. Overall, 87 percent of the participants in the sample earned a scale score above 215. The reading mean scale score was nearly 228. For a complete description of CASAS scale scores, refer to page 7.

On the math portion, forty-three percent of the sample scored 225 or above, 28 percent scored between 215 and 224, 23 percent scored between 200 and 214, and the remaining six percent scored below 200. Overall, 71 percent of the participants in the sample achieved a scale score above 215. The math mean scale score was just over 223. (See Figure 7.)

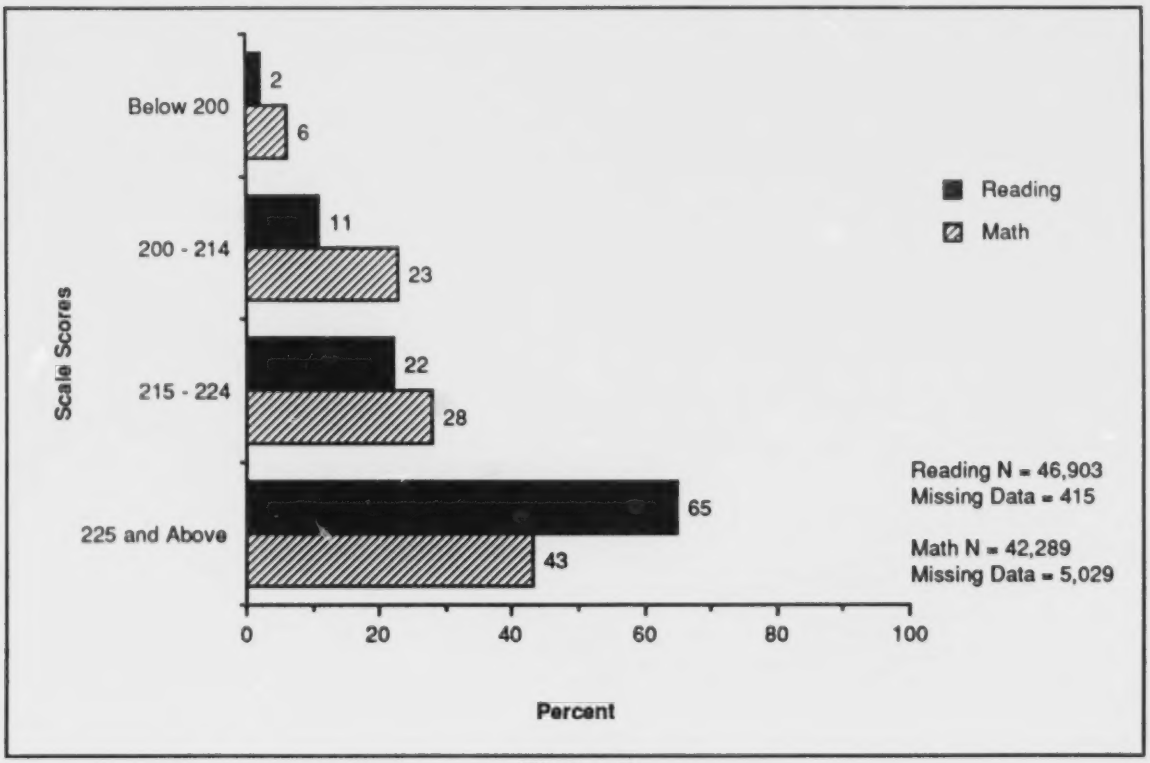

Figure 7

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SCORE GROUP ESTIMATES BY READING AND MATH TEST SCORE

According to the reading and math crosstabulation chart, only 38 percent of the sample learner population taking the ECS Appraisal possess reading and math competency skills at or above a high school entry level. (See Figure 8.)

Figure 8

Reading Score	Math Score: Less than 200	200 - 214	215 -224	225 Plus	Row N / Row %
Less than 200	323 50.9% 12.1% **0.8%**	269 42.4% 2.8% **0.6%**	35 5.5% 0.3% **0.1%**	7 1.1% 0.0% **0.0%**	634 100% **1.5%**
200 - 214	1260 27.0% 47.3% **3.0%**	2386 51.1% 24.6% **5.7%**	814 17.4% 7.0% **1.9%**	212 4.5% 1.2% **0.5%**	4672 100% **11.1%**
215 - 224	748 7.8% 28.1% **1.8%**	3764 39.2% 38.8% **8.9%**	3383 35.2% 29.1% **8.0%**	1706 17.8% 9.4% **4.1%**	9601 100% **22.8%**
225 Plus	334 1.2% 12.5% **0.8%**	3284 12.1% 33.8% **7.8%**	7380 27.2% 63.6% **17.5%**	16176 59.5% 89.4% **38.4%**	27174 100% **64.6%**
Column N Column %	2665 **6.3%**	9703 **23.1%**	11612 **27.6%**	18101 **43.0%**	42081 **100.0%**

How to Read Each Cell:

Number (N)
Row %
Column %
Total %

CASAS, 1991

- Need reading and math remediation (10.1%)
- Need math and some reading remediation (19.3%)
- Need reading and some math remediation (2.5%)
- Would benefit from reading or math reading instruction (29.6%)
- Functioning at high school entry level or above (38.4%)

READING AND MATH TEST SCORES BY GENDER

For both females and males, scale scores on the ECS Reading Test were generally higher than those on the ECS Math Test. Approximately 91 percent of the females and 85 percent of the males scored above a 215 on the Reading test. On the Math test, 74 percent of the females and 69 percent of the males scored above a 215. Within these respective groups, 70 percent of the females scored above a 225 compared to 61 percent of the males in Reading. Females respondents again scored slightly higher in Math (46%) compared to males (42%). (See Figure 9.)

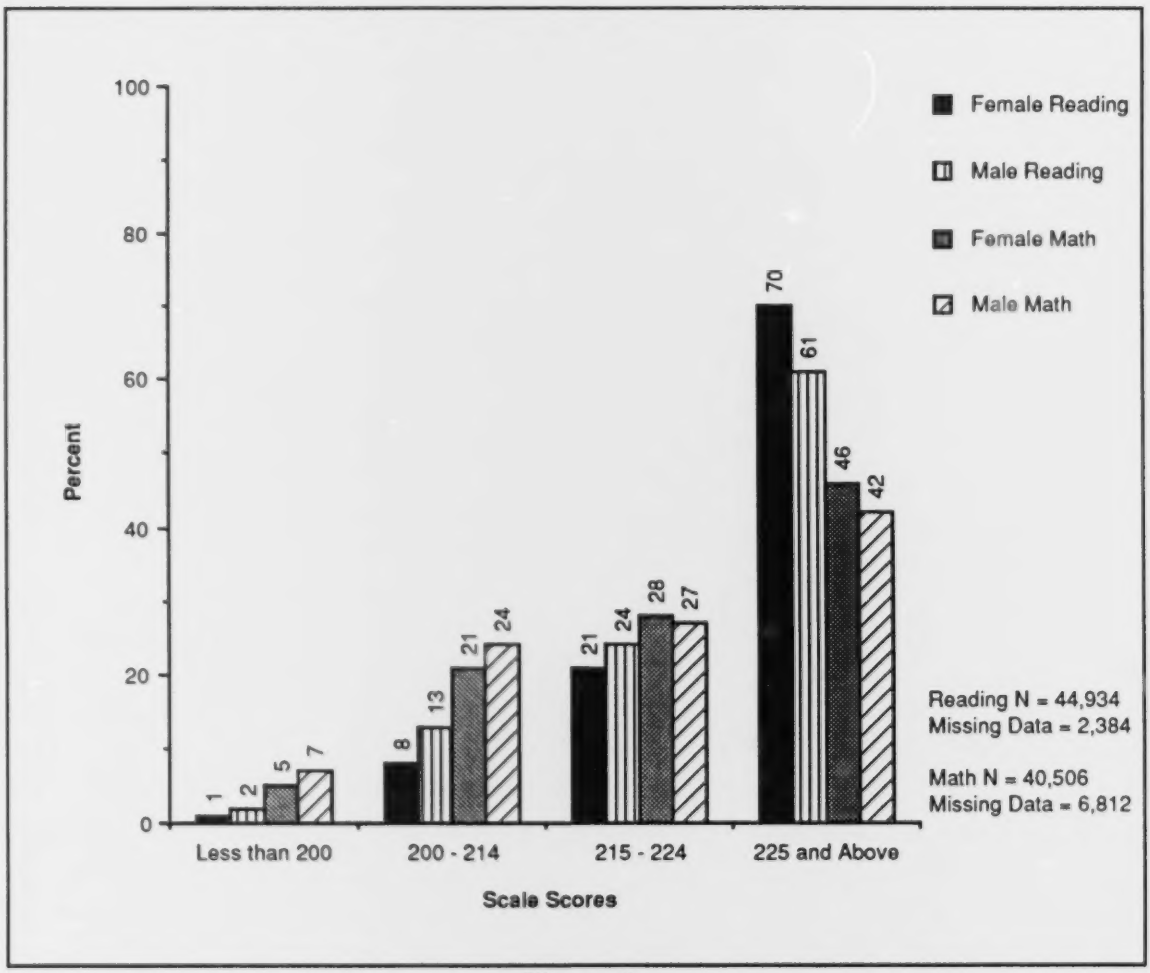

Figure 9

READING TEST SCORE BY AGE

According to the respondent data, the ECS Reading Test scores were generally positively correlated with age. Fifty-four percent of the learners in the sample aged 15 and under achieved reading scale scores at 225 and above, compared to 60 percent of 16 and 17 year olds, 69 percent of respondents aged 18 to 21, and 73 percent of respondents aged 25 and above. (See Figure 10.)

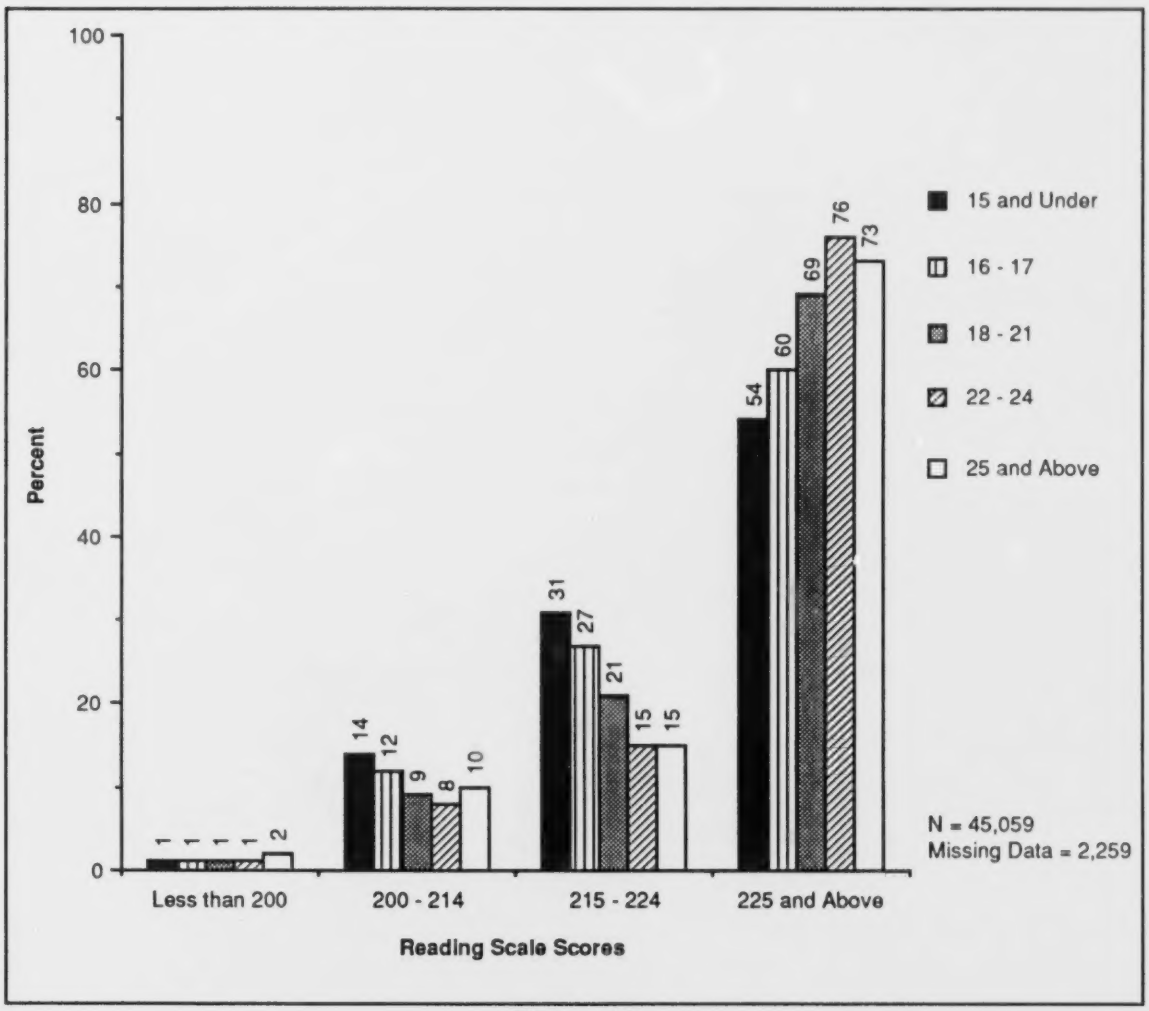

Figure 10

MATH TEST SCORE BY AGE

The ECS Math Test scores were not distinctly correlated with age. Only 36 percent of the learners in the sample aged 15 and under achieved math scale scores at 225 and above, compared to 43 percent of 16 and 17 year olds, 47 percent of 18 to 21 year olds, and 45 percent of respondents aged 25 and above. (See Figure 11.)

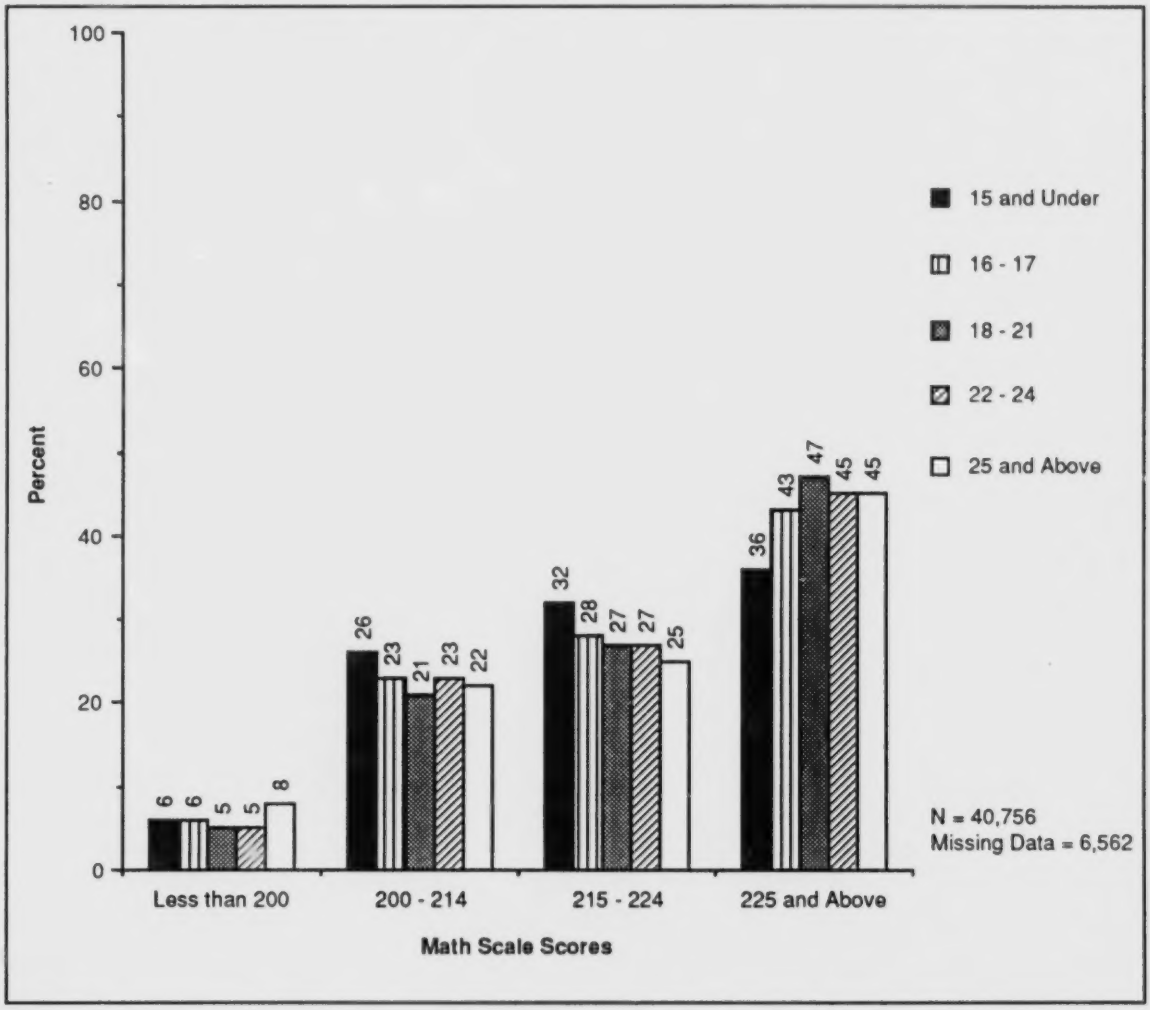

Figure 11

READING TEST SCORE BY ETHNICITY

Of the Caucasian respondents (27%), 80 percent scored 225 or above on the ECS Reading Test. For non-Caucasian respondents, the reading scale scores were more evenly distributed, as 62 percent of the Hispanic respondents (33%), 60 percent of the Black respondents (23%), and 56 percent of the Asian respondents (15%) scored at or above 225 on the reading portion. (See Figure 12.)

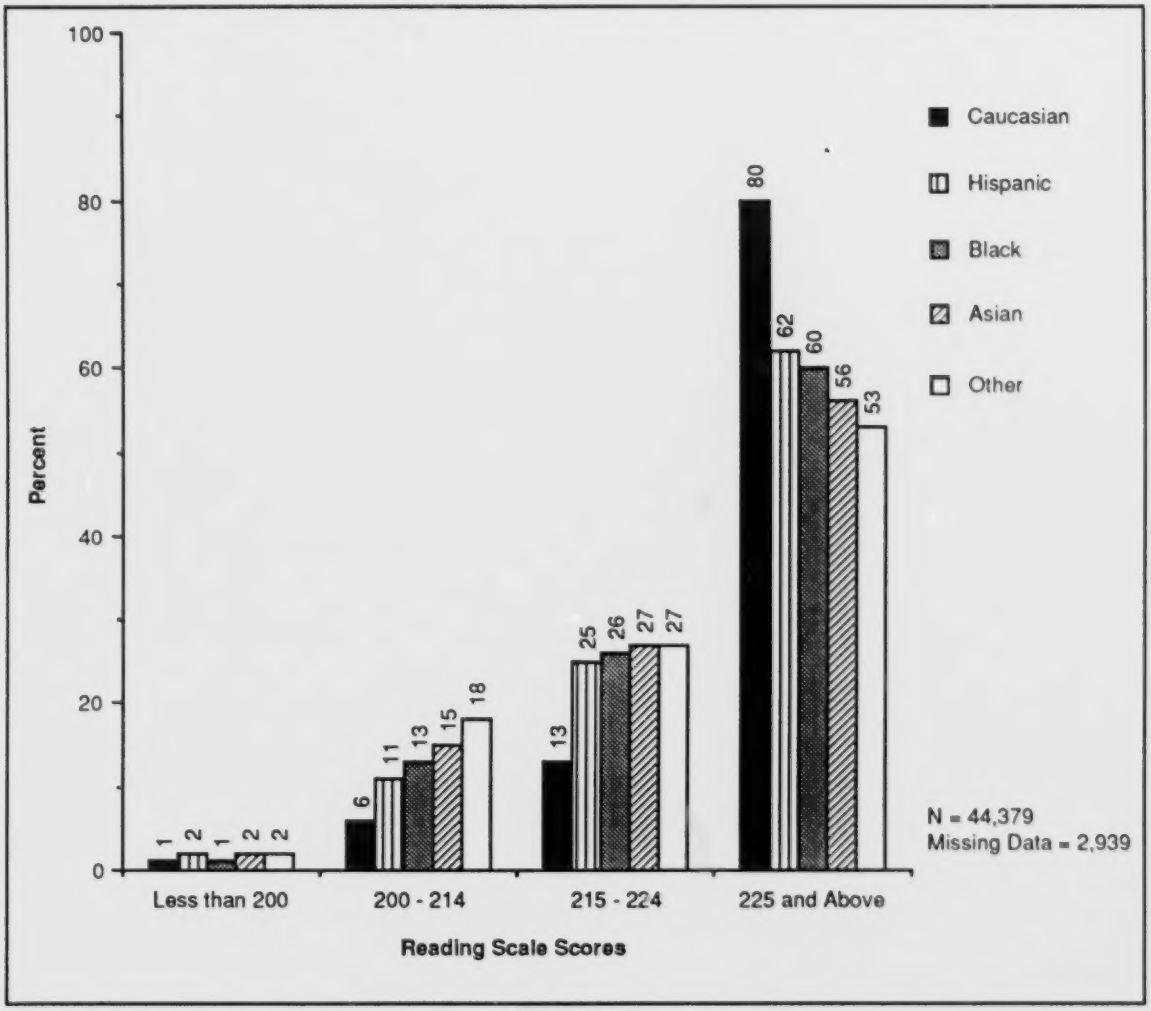

Figure 12

MATH TEST SCORE BY ETHNICITY

On the ECS Math Test, nearly 54 percent of the Caucasian respondents scored 225 or above, compared to almost 42 percent of the Hispanic learners, 30 percent of the Black learners, and over 51 percent of the Asian respondents. Approximately 25 percent of the respondents from each of the ethnic groups scored between 215 and 224 on the math portion. (See Figure 13.)

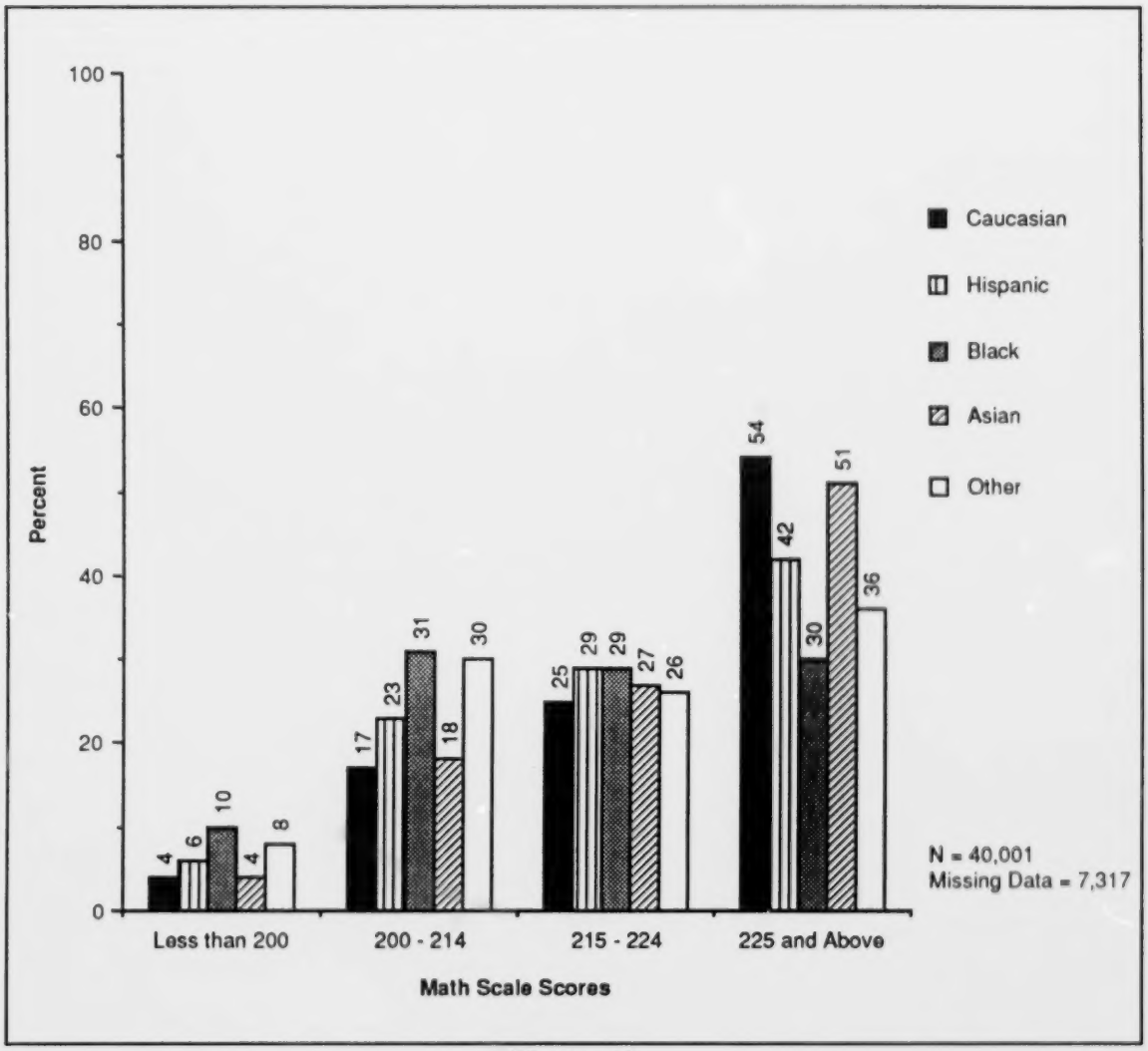

Figure 13

READING TEST SCORE BY HIGHEST GRADE COMPLETED

According to the data, reading test scores are positively correlated with the grade level completed. Of respondents who had completed fewer than eight years of education, approximately 36 percent scored at 225 or above, as compared to 54 percent of respondents who completed eight or nine years of school. Accordingly, 79 percent of learners who had completed high school scored at least 225, as compared to 87 percent of those who had completed education beyond high school. (See Figure 14.)

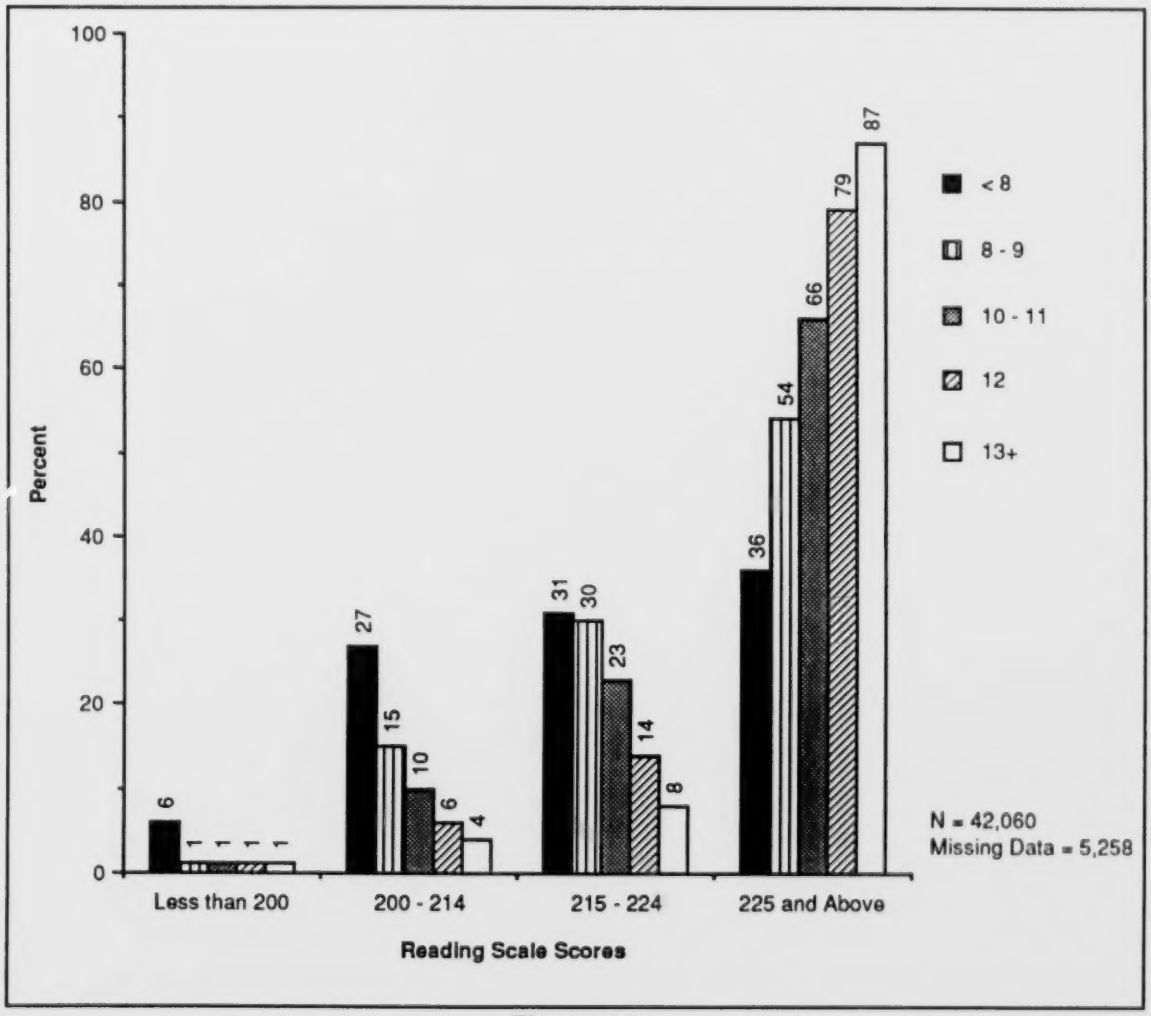

Figure 14

MATH TEST SCORE BY HIGHEST GRADE COMPLETED

Scores on the ECS Math Test were not as positively correlated to highest grade completed as the Reading Test scores. Of respondents who had completed fewer than eight years of education, only 19 percent attained a scale score at 225 or above, compared to 54 percent who had completed 12 years of education, and seventy-four percent of high school graduates. (See Figure 15.)

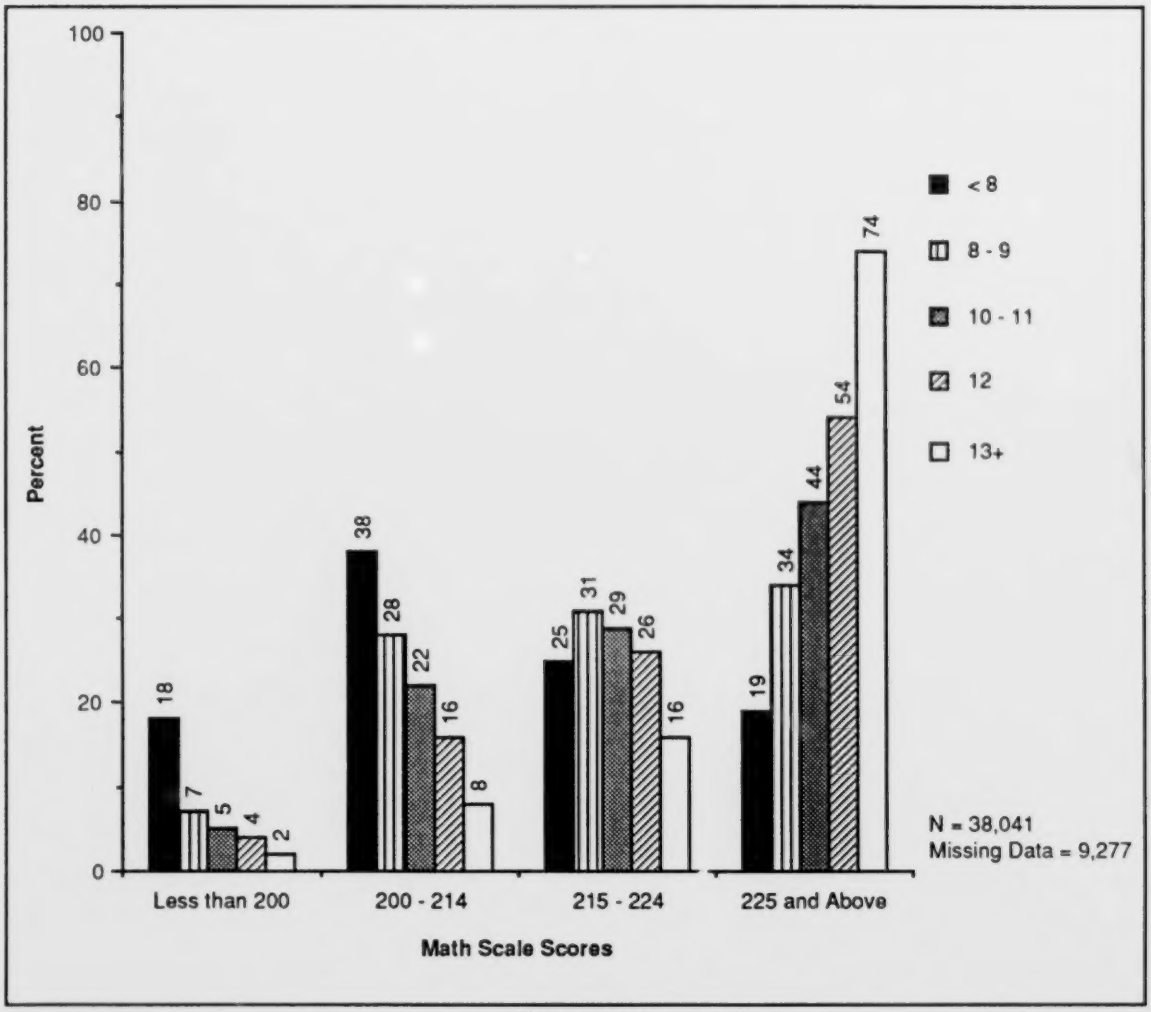

Figure 15

READING TEST SCORE BY HIGHEST DEGREE EARNED

Of the 26 percent of total respondents possessing a high school diploma, 78 percent scored at 225 and above on the ECS Reading Test, 14 percent scored between 215 and 224, and the remaining seven percent scored below 215. As mentioned previously, the majority of the respondents (64%) had not earned any type of educational degree. Of this group, 58 percent scored at or above a 225 on the Reading Test, 27 percent scored between 215 and 224, and the remaining 15 percent scored below 215. (See Figure 16.)

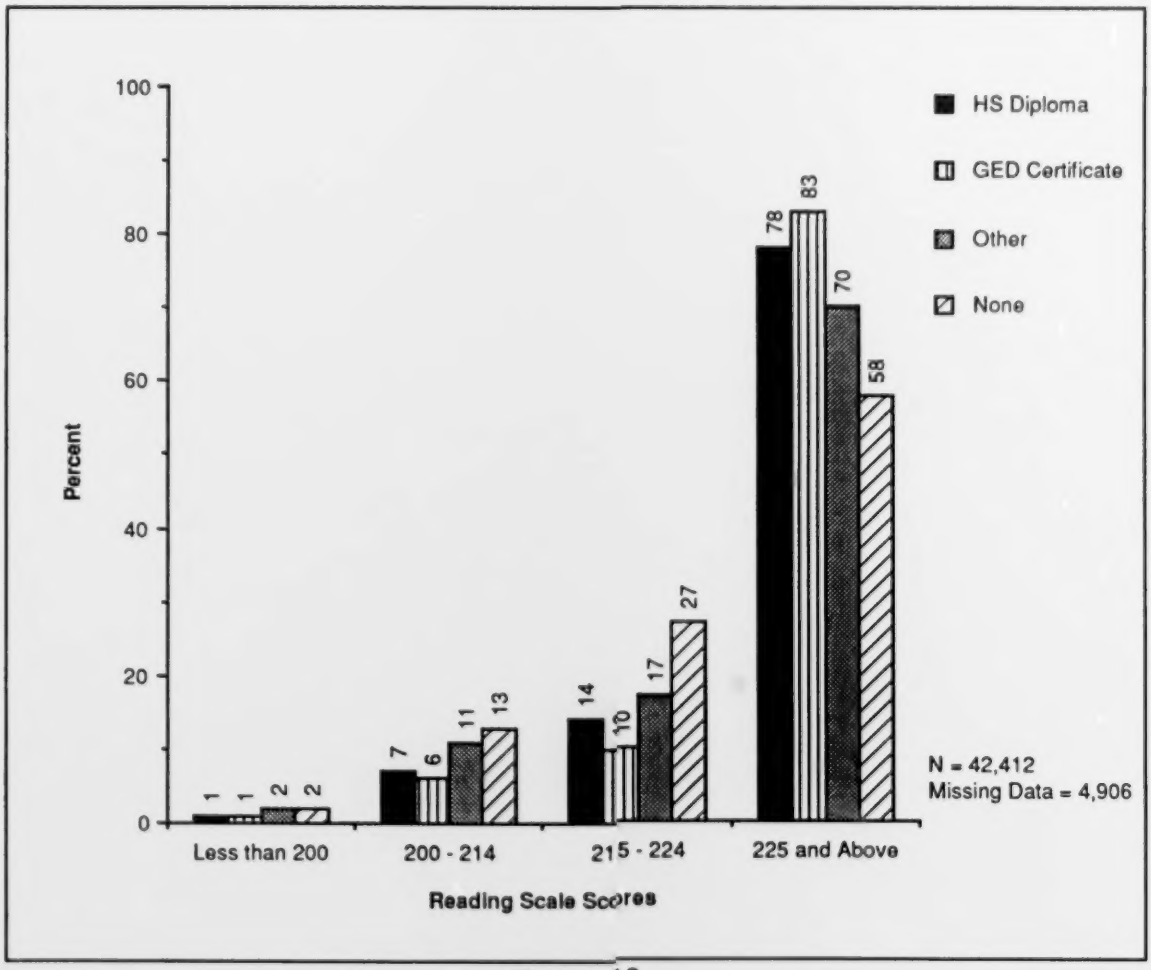

Figure 16

MATH TEST SCORE BY HIGHEST DEGREE EARNED

The ECS Math Test scores were somewhat lower overall than the Reading Test scores. Of the respondents who had earned a high school diploma, over half (56%) scored at 225 or above, while 24 percent scored between 215 and 224. Twenty percent of the respondents possessing a high school diploma scored below 215. Of learners not possessing a high school diploma or equivalent, only 37 percent scored at or above a 225 on the Math Test, 30 percent scored between 215 and 224, and the remaining 33 percent scored below 215. (See Figure 17.)

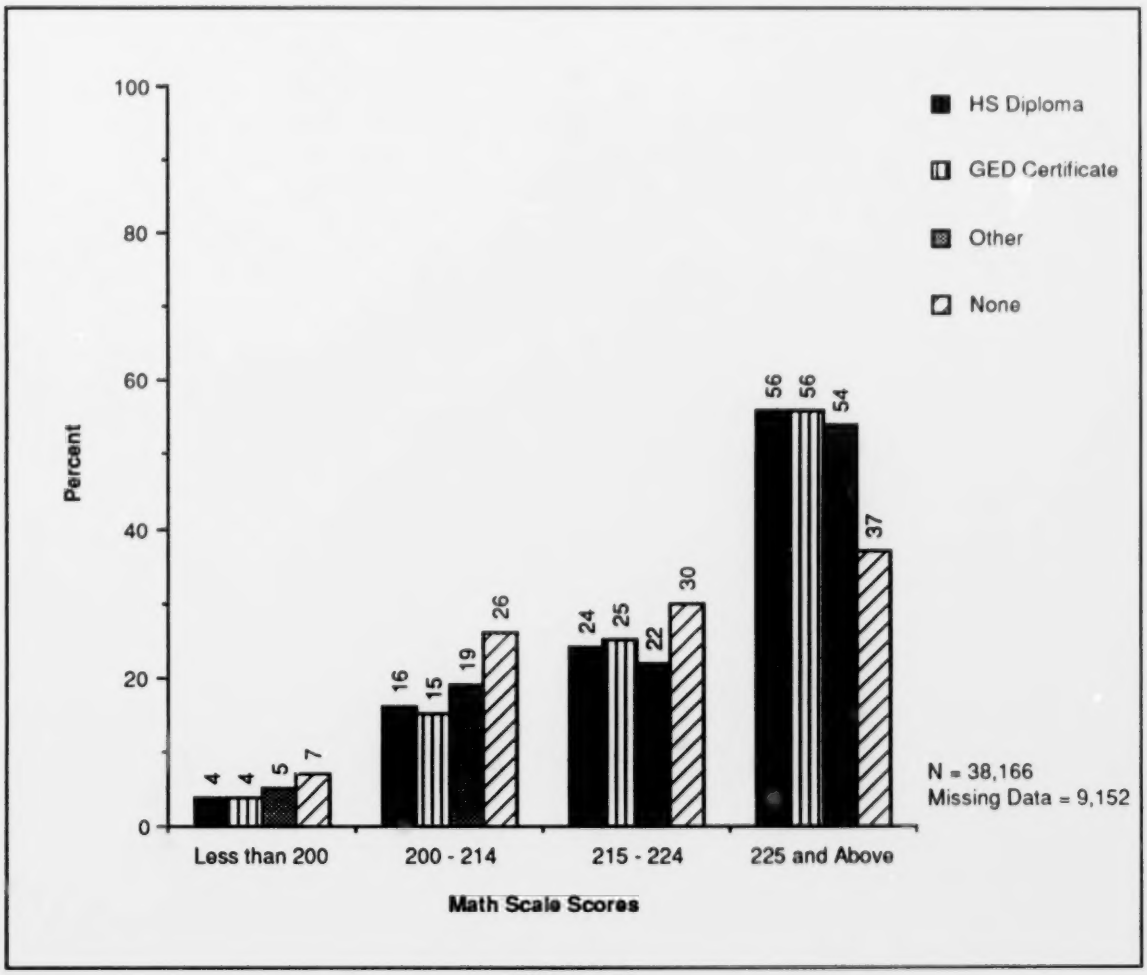

Figure 17

APPENDIX A:
Components of the ECS

The Employability Competency System provides reading, math, and communication assessment linked to employment competencies using several assessment instruments:

ECS Appraisal provides an initial assessment of basic reading and math functional skill levels.

Reading, Math, and Listening Tests in Employability assess a learner's ability to apply basic skills to employment or training-related situations, represented by pencil and paper, multiple-choice questions. For each level diagnostic pre-test, CASAS has developed an alternate post-test. The tests are matched by content according to priority competencies with an equal level of difficulty so they may be used interchangeably. These tests are helpful for instructors to monitor group progress within a class, to provide a solid measure of a program's impact on students, and to determine the instructional focus.

Reading and Math Certification Tests in Employability are used to validate post-test scores or an instructor's judgement about a learner's readiness to progress to the next level, such as GED preparation, high school completion, or vocational training. They measure a select number of prioritized competencies along a very narrow range of difficulty. The certification tests are optional.

Occupation Specific Basic Skill Tests are appropriate for students who wish to enter a training program to determine if they have the necessary basic skills to succeed in an occupational training program. They may also be used to refer students for basic skills remediation. Occupation Specific Tests are currently available in the following areas: Auto Mechanic, Clerical, Food Service, and Health Occupations. Tests for Service Industry Listening and Computer Literacy are currently under development.

ECS Assessment Summary, used in conjunction with an EEDP (Education/Employment Development Plan), assists in monitoring and documenting a learner's progress in the remediation process.

Pre-Employment/Work Maturity Checklists, available in JTPA and non-JTPA versions, may be used during the intake process to determine competence (or deficiency), to diagnose, and to certify competence. They are designed to assess the 11 pre-employment/work maturity content areas as defined by the United States Department of Labor. The seven checklists are: Career Awareness, Preparing a Resume, Cover Letter, Filling out an Application, Interviewing, Work Maturity, and Job Experience/Training.

Application of Critical Thinking Tests assess a learner's critical thinking and written expression skills. The tests contain questions or situations encountered in everyday life and are available in the areas of Social Studies and Science. An Application of Critical Thinking for Employability is currently being field tested and should be available in 1991.

Workplace Literacy Analysis is a checklist that includes reading, writing, math, and communication skills that may be needed by a learner for vocational training and employment. Working through the Analysis with employers and vocational instructors, program coordinators are better able to plan instruction based on accurate and specific basic skill requirements.

The Curriculum Index and Matrix provides instructors with a quick reference system of materials relevant for instruction linked to pre-employment/work maturity competencies and basic skill competencies identified in the ECS. It contains teaching materials coded to the CASAS competency list by type of program (ABE/ESL) and by level (A, B, and C).

The Computer-Aided Instruction Index and Matrix links selected adult courseware to the CASAS Life Skills Competency List. The competency-based software programs, as nominated and reviewed by CASAS Consortium members, are appropriate for all levels of ABE, ESL, ECS, GED, and Special Needs programs. The Computer-Aided Instruction Index and Matrix contains an alphabetical list of publishers and listings of software reviews by title and content area.

Handbook of Career and Vocational Assessment Instruments is a reference guide to assist in the selection of assessment instruments appropriate for youth and adult participants in ABE/ESL, ECS, welfare reform, and special education programs. It contains materials designed to assess a learner's interests, aptitude, pre-employment/work maturity level, work samples, and basic skills. It also contains a section on computer career assessment.

ECS Program Implementation Guide contains relevant information essential for a successful implementation of the Employability Competency System. It is a user manual appropriate for JTPA and non-JTPA program coordinators and instructors using all of the ECS assessment components in their employment training programs. It serves as a central reference guide for the ECS.

APPENDIX B:
Participating Counties and Service Delivery Areas*

CALIFORNIA COUNTIES

Alameda
Alpine
Amador
Butte
Calaveras
Colusa
Contra Costa
Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Merced
Modoct
Mono
Monterey
Napa
Nevada
Orange
Placer
Pluma
Riverside
Sacramento
San Benito
San Bernardino
San Diego
San Francisco
San Joaquin
San Luis Obispo
San Mateo
Santa Barbara
Santa Clara
Santa Cruz
Shasta
Sierra
Siskiyou
Solano
Sonoma
Stanislaus
Sutter
Tehama
Tulare
Tuolumne
Ventura
Yolo
Yuba

CALIFORNIA SERVICE DELIVERY AREAS

ACTEB (Alameda County Training and Employment Board)
Butte County
Carson, Lomita, Torrance Consortium
Contra Costa County
Foothill Employment and Training Consortium
Fresno City/County Consortium
Golden Sierra Consortium
Humboldt County
Imperial County
Kern/Inyo/Mono Consortium
Kings County
Long Beach City
Los Angeles City
Los Angeles County
Marin County
Mendocino County
Merced County
Monterey County
Motherlode Consortium
Napa County
Nortec Consortium
North Central Rural Training and Employment Consortium
North Santa Clara Valley Job Training Consortium (NOVA)
Oakland City
Orange County Consortium
Richmond City
Riverside County
Sacramento City/County Consortium
San Benito County
San Bernardino City
San Bernardino County
San Diego Regional Employment and Training Consortium
San Francisco City and County
San Joaquin County
San Luis Obispo County
San Mateo County
Santa Barbara County
Santa Cruz County

Southeast Los Angeles Consortium (SELACO)
Solano County
Sonoma County
South Bay Consortium
Stanislaus County
Tulare County
Ventura County
Verdugo Consortium
Yolo County

* Agencies using the ECS Appraisal were asked to code their respective county and service delivery area on the answer sheet. The data listed in Appendix B was reported accordingly.